

AUS920040040US1

EL 970318140US

Focazio et al.

Method and Apparatus for Splitting and Merging
Request and Response Data at Runtime

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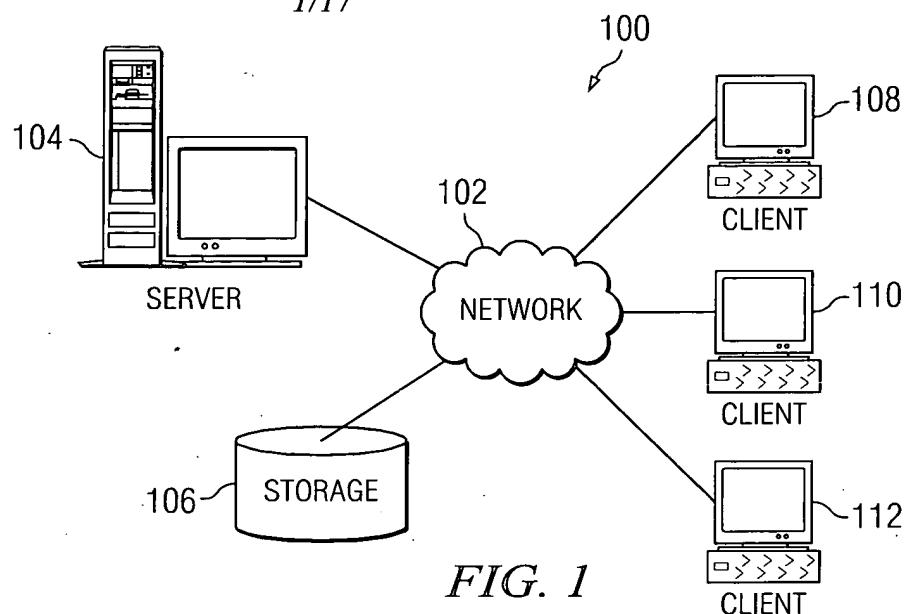


FIG. 1

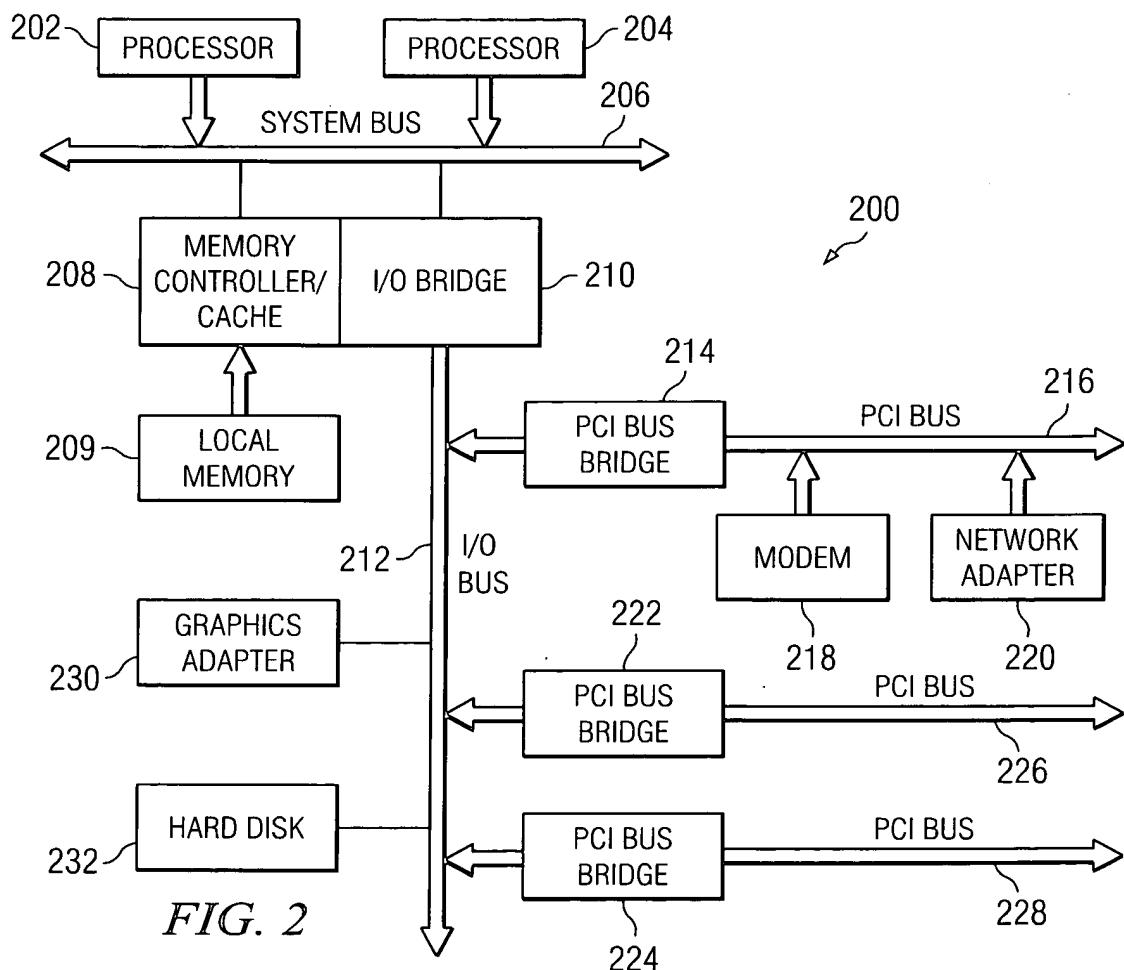


FIG. 2

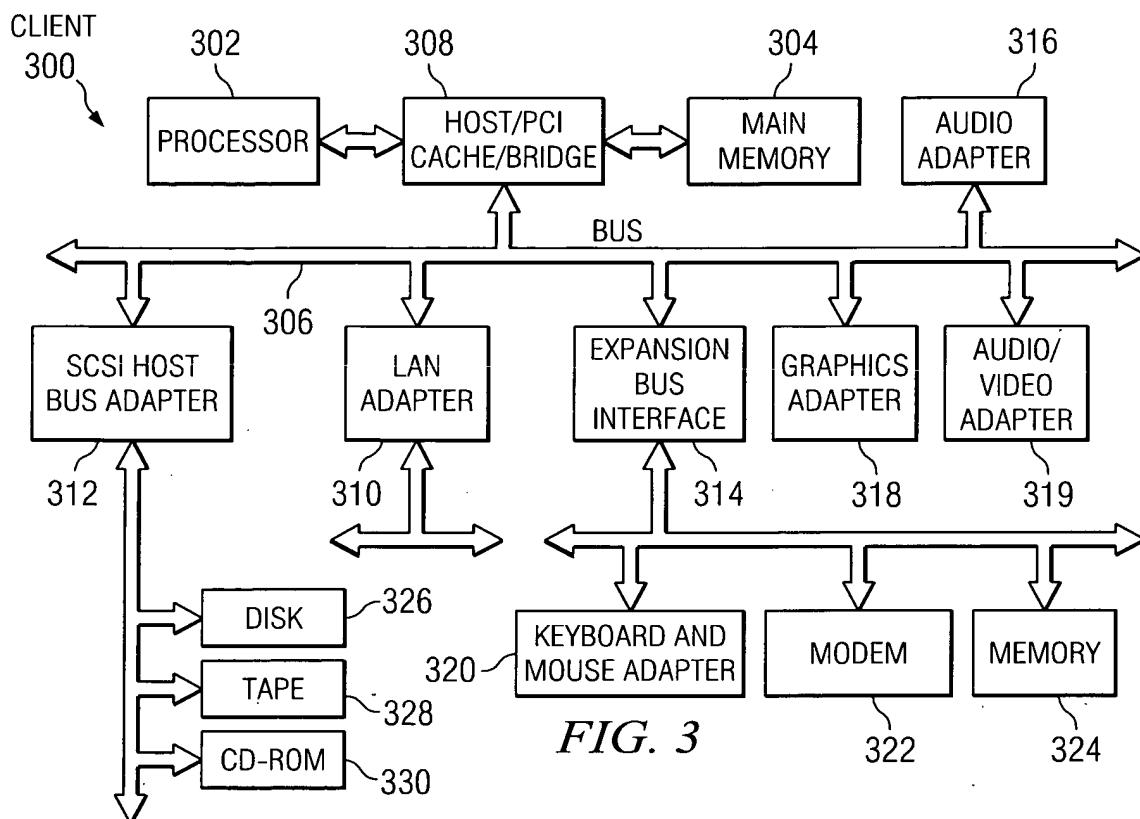


FIG. 3

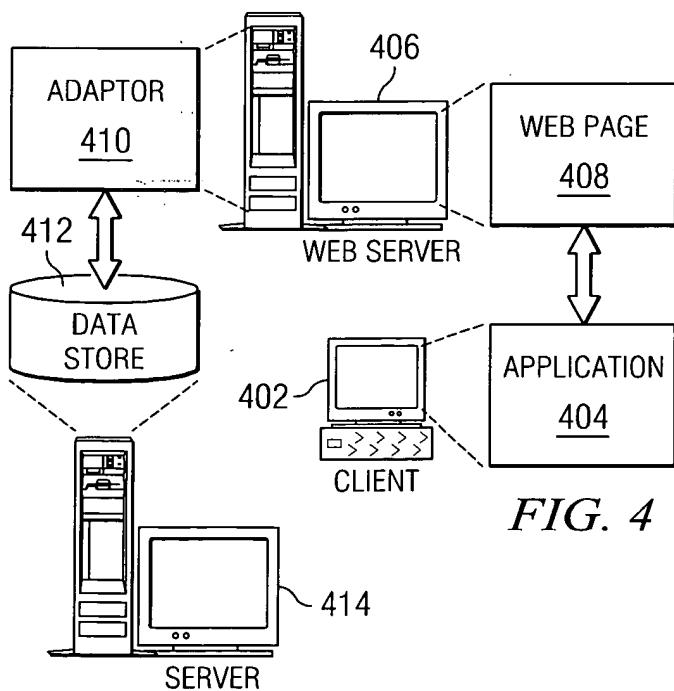


FIG. 4

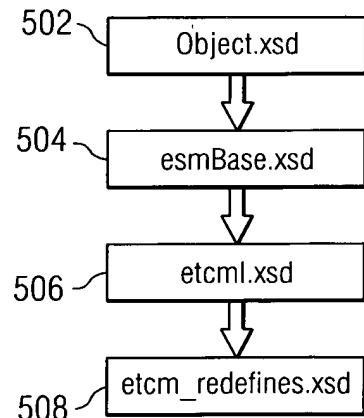


FIG. 5

FIG. 6A

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```

<?xml version="1.0" encoding="UTF-8"?>
<xsd:schema version="1.0" xml:lang="en-US"
targetNamespace="http://www.ibm.com/esm"
xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns="http://www.ibm.com/esm"
xmlns:etcML="http://www.ibm.com/v1/etcML" elementFormDefault="qualified"
attributeFormDefault="qualified">
<xsd:import namespace="http://www.ibm.com/v1/etcML"
schemaLocation="etcml_redefines.xsd" />

602 {   <xsd:element name="esmML" type="etcML:etcRootType"> 604
        <xsd:annotation>
            <xsd:documentation xml:lang="en-us">Root element for our new
extended esm language.</xsd:documentation>
        </xsd:annotation>
    </xsd:element>

    <xsd:complexType name="ESMResponseBodyType">
        <xsd:annotation>
            <xsd:documentation>ESM customized response Body</xsd:documentation>
        </xsd:annotation>
        <xsd:complexContent>
            <xsd:extension base="etcML:ResponseBodyType"> 608
                <xsd:sequence>
                    <xsd:element name="RowSet" type="RowSetType"
minOccurs="0" maxOccurs="1" />
                    <xsd:element name="Properties"
type="PropertiesType" minOccurs="0" maxOccurs="1" />
                </xsd:sequence>
            </xsd:extension> 610
        </xsd:complexContent>
    </xsd:complexType>

    <xsd:complexType name="ParameterType">
        <xsd:complexContent>
            <xsd:extension base="etcML:ParameterType"> 614
                <xsd:sequence>
                    <xsd:element ref="etcML:RequestedFields" minOccurs="1"
maxOccurs="1" /> 616
                    <xsd:element ref="etcML:StartRow" minOccurs="0"
maxOccurs="1" />
                    <xsd:element ref="etcML:MaxRowCount" minOccurs="0"
maxOccurs="1" /> 618
                    <xsd:element ref="etcML:DisplayRowCount" minOccurs="0"
maxOccurs="1" />
                    <xsd:element name="RowSet" type="RowSetType"
minOccurs="0" maxOccurs="1" />
                </xsd:sequence>
            </xsd:extension>
        </xsd:complexContent>
    </xsd:complexType>

```

FIG. 6B

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```

<xsd:complexType name="PropertiesType">
  <xsd:complexContent>
    <xsd:extension base="etcML:TicketingRecordSetType">
      <xsd:sequence maxOccurs="unbounded" minOccurs="1">
        <xsd:element name="Property" type="FieldType" />
      </xsd:sequence>
    </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>

620 { <xsd:complexType name="RowSetType">
  <xsd:complexContent>
    <xsd:extension base="etcML:TicketingRecordSetType">
      <xsd:sequence maxOccurs="unbounded" minOccurs="1">
        <xsd:element name="Row" type="RowType" />
      </xsd:sequence>
      <xsd:attribute name="name" type="xsd:string" />
    </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>

628 { <xsd:complexType name="FieldType"> 624
  <xsd:sequence>
    <xsd:element name="name" type="xsd:string" />
    <xsd:element name="value" type="xsd:string" />
  </xsd:sequence>
</xsd:complexType> 626

623 { <xsd:complexType name="RowType"> 632
  <xsd:sequence minOccurs="0">
    <xsd:element name="Column" type="ColumnType" minOccurs="0"
maxOccurs="unbounded" />
    <xsd:element name="RowSet" type="RowSetType" minOccurs="0"
maxOccurs="unbounded" />
  </xsd:sequence>
  <xsd:attribute name="name" type="xsd:string" />
  <xsd:attribute name="rowNumber" type="xsd:positiveInteger" />
</xsd:complexType> 634

630 { <xsd:complexType name="ColumnType">
  <xsd:complexContent>
    <xsd:extension base="FieldType">
      <xsd:sequence>
        <xsd:element name="enums" type="EnumsType" minOccurs="0" />
        <xsd:element name="metadata" type="MetadataType" minOccurs="0" />
      </xsd:sequence>
    </xsd:extension>
  </xsd:complexContent>
</xsd:complexType> 638

636 { <xsd:complexType name="EnumsType">
  <xsd:sequence maxOccurs="unbounded" minOccurs="1">
    <xsd:element name="enum" type="xsd:string" />
  </xsd:sequence>
</xsd:complexType>

640 { <xsd:complexType name="MetadataType">
  <xsd:sequence maxOccurs="unbounded" minOccurs="1">
    <xsd:element name="meta" type="xsd:string" />
  </xsd:sequence>
</xsd:complexType>

```

FIG. 7A

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```

<?xml version="1.0" encoding="UTF-8"?>
<xsd:schema xml:lang="en-us" version="1.0" elementFormDefault="unqualified"
  xmlns:xsd="http://www.w3.org/2001/XMLSchema" attributeFormDefault="unqualified"
  targetNamespace="http://www.ibm.com/v1/etcML"
  xmlns="http://www.ibm.com/v1/etcML" xmlns:Q1="http://www.ibm.com/etc">

  700
    <xsd:complexType name="etcRootType"> 704
      <xsd:sequence minOccurs="1" maxOccurs="1">
        <xsd:element name="Transactions" type="TransactionsContainerType"
          minOccurs="0" maxOccurs="1" />
      </xsd:sequence>
      <xsd:attribute name="ID" type="xsd:ID" use="optional" />
    </xsd:complexType>

  702  <xsd:complexType name="TransactionsContainerType"> 708
    <xsd:choice minOccurs="1" maxOccurs="1">
      <xsd:element name="Request" type="TransactionRequestType"
        minOccurs="0" maxOccurs="1" />
      <xsd:element name="Response" type="TransactionResponseType"
        minOccurs="0" maxOccurs="1" />
    </xsd:choice> 710
  </xsd:complexType>

  706  <xsd:complexType name="TransactionRequestType"> 714
    <xsd:complexContent>
      <xsd:extension base="TransactionType"> 716
        <xsd:sequence>
          <xsd:element name="SystemID" type="ProviderType"
            minOccurs="0"
            maxOccurs="1" />
          <xsd:element name="TransactionType"
            type="ProviderActionType" minOccurs="1" maxOccurs="1" />
        </xsd:sequence>
      </xsd:extension> 718
    </xsd:complexContent>
  </xsd:complexType>

  712  <xsd:complexType name="TransactionType">
    <xsd:attribute name="userID" type="xsd:string" use="required" />
    <xsd:attribute name="password" type="xsd:string" use="optional" />
    <xsd:attribute name="timeStamp" type="xsd:dateTime" use="required" />
    <xsd:attribute name="languageCode" type="LanguageCodeType" use="required" />
    <xsd:attribute name="countryCode" type="CountryCodeType" use="required" />
    <xsd:attribute name="timeZone" type="TimeZoneType" use="required" />
  </xsd:complexType>

  720  <xsd:simpleType name="ProviderType">
    <xsd:restriction base="xsd:string">
      <xsd:enumeration value="e-ESM61"/> 724
      <xsd:enumeration value="e-ESM44"/> 726
    </xsd:restriction>
  </xsd:simpleType>

```

FIG. 7B

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```

<xsd:complexType name="TransactionFilteredRequestType">
    <xsd:complexContent>
        <xsd:extension base="TransactionRequestType">
            <xsd:sequence>
                <xsd:element ref="Filters" minOccurs="0"
                    maxOccurs="1"></xsd:element> 732
                <xsd:element ref="Sort" minOccurs="0"
                    maxOccurs="1"></xsd:element> 734
            </xsd:sequence>
        </xsd:extension>
    </xsd:complexContent>
</xsd:complexType>

<xsd:element name="Sort">
    <xsd:complexType>
        <xsd:sequence maxOccurs="1" minOccurs="1">
            <xsd:element ref="SortOrder" minOccurs="1"
                maxOccurs="unbounded" /> 738
        </xsd:sequence>
    </xsd:complexType>
</xsd:element>

<xsd:element name="SortOrder" type="SortOrderType" />

<xsd:complexType name="SortOrderType">
    <xsd:sequence minOccurs="1" maxOccurs="1">
        <xsd:element ref="Value" minOccurs="1"
            maxOccurs="1"></xsd:element> 744
        <xsd:attribute name="operator"
            type="SQLGroupByOperatorType"></xsd:attribute>
    </xsd:sequence>
</xsd:complexType>

<xsd:element name="Value" type="xsd:string"></xsd:element>

<xsd:simpleType name="SQLGroupByOperatorType">
    <xsd:restriction base="xsd:string">
        <xsd:enumeration value="Ascending"></xsd:enumeration> 748
        <xsd:enumeration value="Descending"></xsd:enumeration>
    </xsd:restriction>
</xsd:simpleType> 750

<xsd:element name="Filters">
    <xsd:complexType>
        <xsd:sequence maxOccurs="unbounded" /> 754
            <xsd:element ref="Filter" minOccurs="0"
                maxOccurs="unbounded" /> 756
            <xsd:element ref="Filters" minOccurs="0"
                maxOccurs="unbounded" /> 758
        </xsd:sequence>
        <xsd:attribute name="operator"
            type="SQLConditionJoinOperatorType" use="required" />
    </xsd:complexType>
</xsd:element>

```

FIG. 7C

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```

<xsd:simpleType name="SQLConditionJoinOperatorType">
  <xsd:restriction base="xsd:string">
    <xsd:enumeration value="And" /> 762
    </xsd:enumeration>
    <xsd:enumeration value="Or" /> 764
    </xsd:enumeration>
  </xsd:restriction>
</xsd:simpleType>

<xsd:element name="Filter" type="FilterType" />

<xsd:complexType name="FilterType">
  <xsd:sequence minOccurs="0" maxOccurs="unbounded">
    <xsd:element ref="Value" minOccurs="1" maxOccurs="unbounded" />
  </xsd:sequence>
  <xsd:attribute name="key" type="xsd:string" use="required" />
  <xsd:attribute name="operator" type="SQLConditionOperatorType" use="required" /> 770
</xsd:complexType>

<xsd:simpleType name="SQLConditionOperatorType">
  <xsd:restriction base="xsd:string">
    <xsd:enumeration value="Equal" /> </xsd:enumeration>
    <xsd:enumeration value="GreaterThan" /> </xsd:enumeration>
    <xsd:enumeration value="LessThan" /> </xsd:enumeration>
    <xsd:enumeration value="GreaterThanOrEqualTo" /> </xsd:enumeration>
    <xsd:enumeration value="LessThanOrEqualTo" /> </xsd:enumeration>
    <xsd:enumeration value="NotEqualTo" /> </xsd:enumeration>
    <xsd:enumeration value="Like" /> </xsd:enumeration>
    <xsd:enumeration value="In" /> </xsd:enumeration>
    <xsd:enumeration value="Between" /> </xsd:enumeration>
    <xsd:enumeration value="NotIn" /> </xsd:enumeration>
    <xsd:enumeration value="NotBetween" /> </xsd:enumeration>
  </xsd:restriction>
</xsd:simpleType>

<xsd:complexType name="TransactionResponseType">
  <xsd:complexContent>
    <xsd:extension base="TransactionType">
      <xsd:sequence minOccurs="1" maxOccurs="1">
        <xsd:element name="SystemID" type="ProviderType" minOccurs="0" maxOccurs="1" />
        <xsd:element name="TransactionType" type="ProviderActionType" minOccurs="1" maxOccurs="1" />
        <xsd:element name="ErrorCode" type="ProviderErrorCodeType" /> 778
          minOccurs="1" maxOccurs="1" />
        <xsd:element name="ResponseDescription" type="xsd:string" minOccurs="1" maxOccurs="1" />
        <xsd:element name="Body" type="ResponseBodyType" minOccurs="0" maxOccurs="1" />
      </xsd:sequence>
    </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>

```

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780 {
 <xsd:simpleType name="ProviderErrorCodeType">
 <xsd:restriction base="xsd:string">
 <xsd:enumeration value="0" /> 782
 <xsd:annotation>
 <xsd:documentation xml:lang="en-us">Successful 784
 transaction </xsd:documentation>
 </xsd:annotation>
 </xsd:enumeration>
 <xsd:enumeration value="10000" /> 786
 <xsd:annotation>
 <xsd:documentation xml:lang="en-us">System
 788 failure </xsd:documentation>
 </xsd:annotation>
 </xsd:enumeration>
 </xsd:restriction>
 </xsd:simpleType>
}</xsd:schema>

FIG. 7D

800 ↗
 <?xml version="1.0" encoding="UTF-8"?>
 <xsd:schema targetNamespace="http://www.ibm.com/v1/etcML"
 xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns="http://www.ibm.com/v1/etcML" attributeFormDefault="unqualified"
 elementFormDefault="unqualified">

 <xsd:redefine schemaLocation="etcml.xsd">
 820 {
 <xsd:simpleType name="ProviderActionType">
 <xsd:restriction base="ProviderActionType">
 <xsd:enumeration value="add" />
 <xsd:enumeration value="delete" />
 <xsd:enumeration value="get" />
 <xsd:enumeration value="list" />
 <xsd:enumeration value="validate" />
 <xsd:enumeration value="modify" />
 </xsd:restriction>
 </xsd:simpleType>

 822 {
 <xsd:simpleType name="ProviderErrorCodeType">
 <xsd:restriction base="ProviderErrorCodeType">
 <xsd:minInclusive>0</xsd:minInclusive>
 <xsd:maxInclusive>12000</xsd:maxInclusive>
 </xsd:restriction>
 </xsd:simpleType>
 }</xsd:redefine>
 </xsd:schema>

FIG. 8

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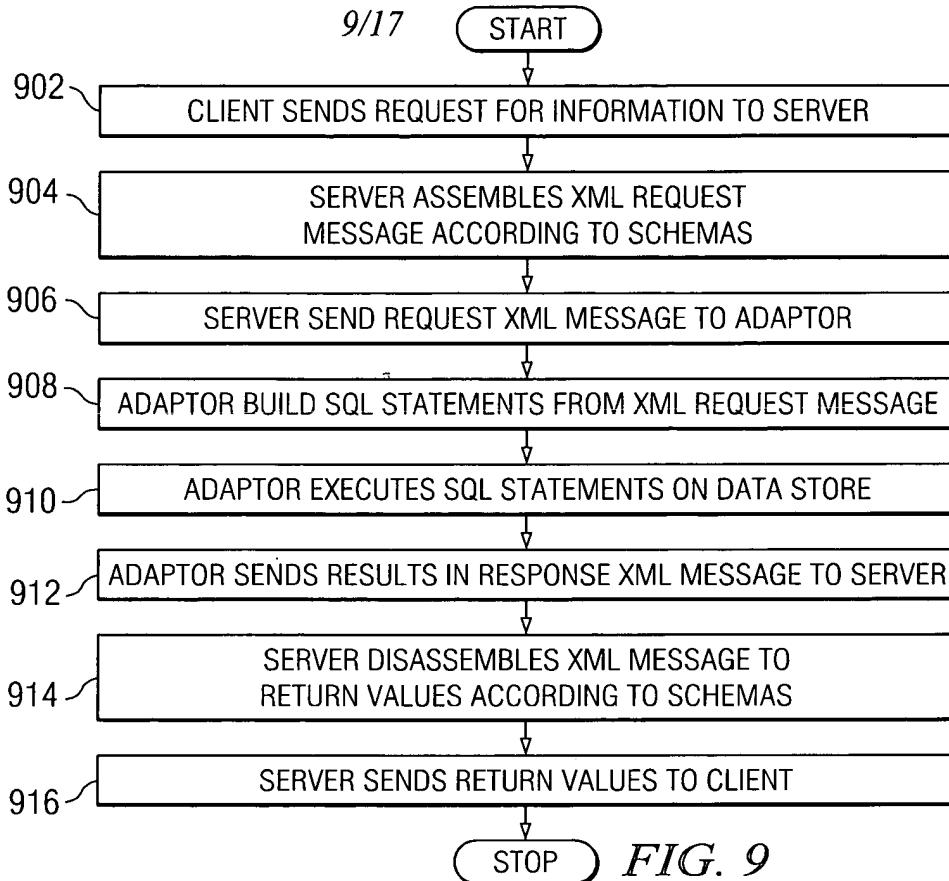


FIG. 9

```

<?xml version="1.0" encoding="UTF-8"?>
<esm:esmML xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:esm="http://www.ibm.com/esm" xmlns:etcML="http://www.ibm.com/v1/etcML" ID="1">
    1002 <Transactions>
        1004 <Request xsi:type="esm:ObjectRequestType" countryCode="fr" languageCode="FR"
            timeZone="" esm:agentID="EXAV" esm:userTrace="false">
                1008 <SystemID>eESM630</SystemID>
                1006 <TransactionType>list</TransactionType>
                1006 <Parameters xsi:type="esm:ParameterType">
                    1010 <etcML:RequestedFields>
                        1012 <RequestedField>ProblemTicket.id</RequestedField>
                        1012 <RequestedField>ProblemTicket.Person.id</RequestedField>
                    1016 </etcML:RequestedFields>
                    1016 <etcML:StartRow>1</etcML:StartRow>
                    1018 <etcML:DisplayRowCount>10</etcML:DisplayRowCount>
                1022 </Parameters>
                1020 <etcML:Filters operator="AND">
                    1026 <etcML:Filter key="ProblemTicket.id" operator="NotEqualTo">
                        1026 <etcML:Value>L</etcML:Value>
                    1024 </etcML:Filter>
                1000 </etcML:Filters>
                1028 <esm:TransactionTarget>ProblemTicket</esm:TransactionTarget>
            1028 </Request>
        1000 </Transactions>
    1000 </esm:esmML>

```

The XML code represents a request for a list of Problem Tickets, specifying fields like id and Person.id, and filtering by id not equal to L. The code is annotated with line numbers (1000, 1002, 1004, 1006, 1008, 1010, 1012, 1014, 1016, 1018, 1020, 1022, 1024, 1026, 1028) corresponding to the steps in the flowchart.

FIG. 10

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[11/14/03 15:55:57.057 CST] Servlet.Engine.Transports : 0:DEBUG
 com.ibm.etc.cct.adapter.esm63.ejb.ESMAdapter63Bean.DataAccessManager - SQL 1101
 1102 ~ 1104 ~ 1106 ~
 Stmt:SELECT PROBLEMS.PROBLEM_ID, PROBLEMS.FIRST_PEOPLE_ID FROM
 1108 ~ TSD630UC.PROBLEMS PROBLEMS WHERE 1=1 AND ((PROBLEMS.PROBLEM_ID <>?)
 FETCH FIRST 201 ROWS ONLY 1110 ~
 1111 ~
 [11/14/03 15:55:57.057 CST] Servlet.Engine.Transports : 0:DEBUG
 com.ibm.etc.cct.adapter.esm63.ejb.ESMAdapter63Bean.DataAccessManager-
 setParameters(List parameters, PreparedStatement iPS):Param Type: CHAR Value:L 1112
 1113 ~
<?xml version="1.0" encoding="UTF-8"?>
<esm:esmML xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns:esm="http://www.ibm.com/esm" ID="1"> 1120
 1122 ~ <Transactions>
 1124 ~ <Response xsi:type="esm:ObjectResponseType" countryCode="fr" language code="FR"
 timeStamp="2003-11-14T22:04:24Z" timeZone="">
 <SystemID>eESM630</SystemID>
 <TransactionType>list</TransactionType> 1128
 1132 ~ <ErrorCode>0</ErrorCode> 1126
 <ResponseDescription>success</ResponseDescription> 1130
 1134 ~ <Body xsi:type="esm:ObjectResponseBodyType">
 1136 ~ <esm:RowSet displayRowCount="10" fetchCount="201" maxRowCount="200"
 startRow="1" totalCount="200" esm:name="ProblemTicket"> 1137
 1138 ~ <esm:Row esm:name="ProblemTicket" esm:rowNumber="1">
 1139 ~ <esm:Column>
 <esm:name>ProblemTicket.id</esm:name> 1140
 <esm:value>SITEA-00000034 </esm:value> 1142
 </esm:Column>
 <esm:Column>
 1141 ~ <esm:Row esm:name="ProblemTicket" esm:rowNumber="2">
 <esm:Column>
 <esm:name>ProblemTicket.id</esm:name>
 <esm:value>SITEA-00000089 </esm:value> 1144
 </esm:Column>
 <esm:Column>
 <esm:name>ProblemTicket.Person.id</esm:name>
 <esm:value>470000003</esm:value> 1146
 </esm:Column>
 </esm:Row>
 <esm:Row esm:name="ProblemTicket" esm:rowNumber="3">
 <esm:Column>
 <esm:name>ProblemTicket.id</esm:name>
 <esm:value>SITEA-00000089 </esm:value>
 </esm:Column>
 <esm:Column>
 <esm:name>ProblemTicket.Person.id</esm:name>
 <esm:value>470000003</esm:value>
 </esm:Column>
 </esm:Row>
 </esm:RowSet>
 </Body>
 </Request>
 </Transactions>
</esm:esmML>

FIG. 11

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```
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  ↗
  1203
<splitReferences>
  1202 { <splitReference id="ProblemTicket.openDateTime">
    <reference>
    1205 ~ <order>1</order>
    1206 ~ <value>ProblemTicket.openDate</value>
    </reference>
    <reference>
    1209 ~ <order>2</order>
    1210 ~ <value>ProblemTicket.openTime</value>
    </reference>
  </splitReference>
  <splitReference id="ProblemTicketHistory.description">
    <reference>
    1212 { 1215 ~ <order>1</order>
    1216 ~ <splitLength>254</splitLength>
    1217 ~ <value>ProblemTicketHistory.descriptionPart1</value>
    </reference>
    <reference>
    1220 ~ <order>2</order>
    1222 ~ <value>ProblemTicketHistory.descriptionPart2</value>
    </reference>
  </splitReference>
</splitReferences>
```

FIG. 12A

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1228 ~ <order> 1 </order>

1229 ~ <value> ProblemTicket.openTime </value>

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1234 ~ <order> 2 </order>

1235 ~ <value> ProblemTicket.openDate </value>

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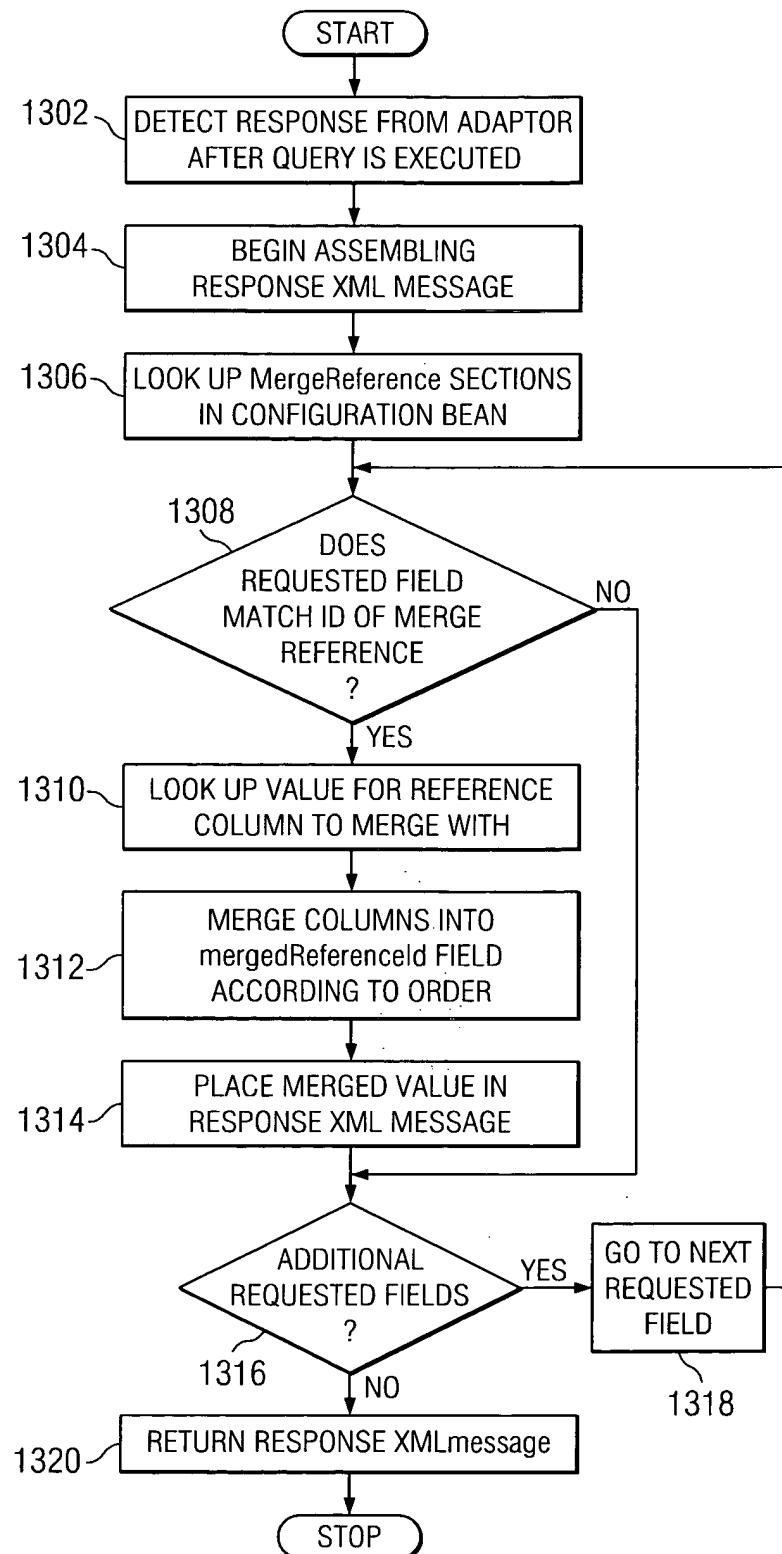
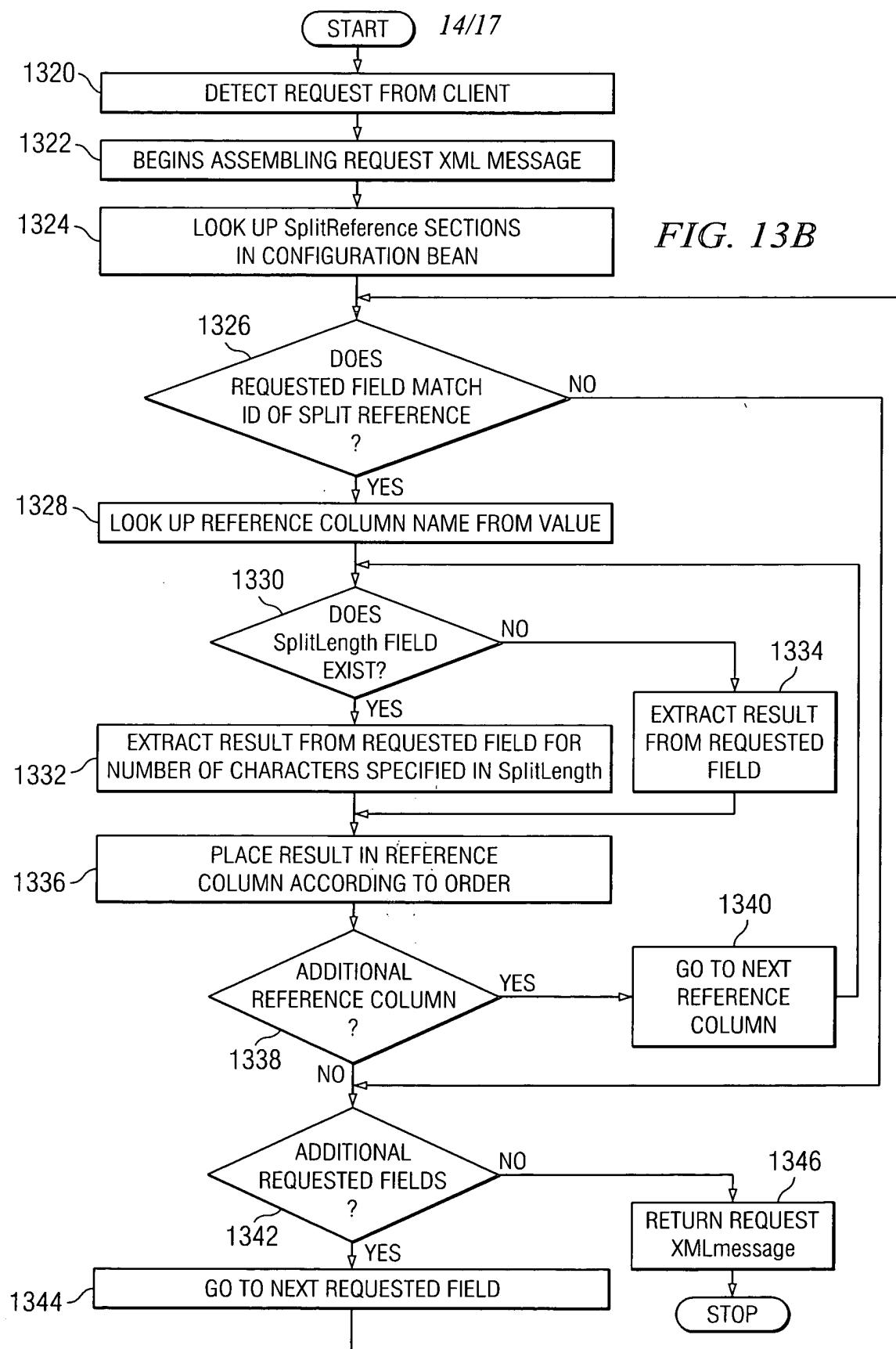


FIG. 13A



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1402 ~

```
<?xml version="1.0" encoding="UTF-8"?>
<esm:esmML xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns:esm="http://www.ibm.com/esm" xmlns:etcML="http://www.ibm.com/v1/etcML" ID="2">
  <Transactions>
    <Request xsi:type="esm:ObjectRequestType" countryCode="fr" languageCode="FR"
      timeZone="" esm:agentID="EXAV" esm:userTrace="false">
      <SystemID>eESM630</SystemID>
      <TransactionType>get</TransactionType>
      <Parameters xsi:type="esm:ParameterType">
        <etcML:RequestedFields>
          <RequestedField>ProblemTicket.openDateTime</RequestedField>
        </etcML:RequestedFields>
        <etcML:StartRow>1</etcML:StartRow>
        <etcML:DisplayRowCount>10</etcML:DisplayRowCount>
      </Parameters>
      <etcML:Filters operator="AND">
        <etcML:Filter key="ProblemTicket.id" operator="Equal">
          <etcML:Value>SITEA-00001262</etcML:Value>
        </etcML:Filter>
      </etcML:Filters>
      <esm:TransactionTarget>ProblemTicket</esm:TransactionTarget>
    </Request>
  </Transactions>
</esm:esmML>
```

FIG. 14A

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```
<?xml version="1.0" encoding="UTF-8"?>
<esm:esmML xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns:esm="http://www.ibm.com/esm" xmlns:etcML="http://www.ibm.com/v1/etcML" ID="2">
  <Transactions>
    <Request xsi:type="esm:ObjectRequestType" countryCode="fr" languageCode="FR"
      timeZone="Europe/Paris" esm:agentID="EXAV" esm:userTrace="false"> ~1417
      <SystemID>eESM630</SystemID>
      <TransactionType>get</TransactionType>
      <Parameters xsi:type="esm:ParameterType">
        <etcML:RequestedFields>
          1412 ~ <RequestedField>ProblemTicket.openDate</RequestedField>
          1414 ~ <RequestedField>ProblemTicket.openTime</RequestedField>
        </etcML:RequestedFields>
        <etcML:StartRow>1</etcML:StartRow>
        <etcML:DisplayRowCount>10</etcML:DisplayRowCount>
      </Parameters>
      <etcML:Filters operator="AND">
        <etcML:Filter key="ProblemTicket.id" operator="Equal">
          <etcML:Value>SITEA-00001262</etcML:Value>
        </etcML:Filter>
      </etcML:Filters>
      <esm:TransactionTarget>ProblemTicket</esm:TransactionTarget>
    </Request>
  </Transactions>
</esm:esmML>
```

FIG. 14B

1416

[11/14/03 16:00:16.016 CST] Servlet.Engine.Transports : 0:DEBUG
com.ibm.etc.cct.adapter.esm63.ejb.ESMAdapter63Bean.DataAccessManager-SQL
Stmt:SELECT PROBLEMS.OPEN_DATE, PROBLEMS.OPEN_TIME FROM

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TSD630UC.PROBLEMS PROBLEMS WHERE 1=1 AND ((PROBLEMS.PROBLEM_ID = ?
)) FETCH FIRST 2 ROWS ONLY
[11/14/03 16:00:16.016 CST] Servlet.Engine.Transports : 0:DEBUG
com.ibm.etc.cct.adapter.esm63.ejb.ESMAdapter63Bean.DataAccessManager -
setParameters(List parameters, PreparedStatement iPS):Param Type: CHAR Value: SITEA-
00001262

FIG. 14C

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PROBLEMS	
OPEN_DATE	OPEN_TIME
AUG 26, 2003	8:32:19 PM

FIG. 14D

<?xml version="1.0" encoding="UTF-8"?>
<esm:esmML xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:esm="http://www.ibm.com/esm" ID="2">
 <Transactions>
 <Response xsl:type="esm:ObjectResponseType" timeStamp="2003-11-14T22:08:47Z">
 <SystemID>eESM630</SystemID>
 <TransactionType>get</TransactionType>
 <ErrorCode>0</ErrorCode>
 <ResponseDescription>success</ResponseDescription>
 <Body xsl:type="esm:ObjectResponseBodyType">
 <esm:RowSet fetchCount="1" maxRowCount="1" startRow="1" totalCount="1"
 esm:name="ProblemTicket">
 <esm:Row esm:name="ProblemTicket" esm:rowNumber="1">
 <esm:Column>
 1432 <esm:name>ProblemTicket.openDateTime</esm:name>
 1434 <esm:value>Aug 26, 2003 8:32:19 PM</esm:value>
 </esm:Column>
 </esm:Row>
 </esm:RowSet>
 </Body>
 <esm:TransactionTarget>ProblemTicket</esm:TransactionTarget>
 </Response>
 </Transactions>
</esm:esmML>

FIG. 14E